Attorney Docket No. 290312US41XPCT

Inventor: Niaz AKISHEV, et al.

Preliminary Amendment

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Original): A device for sheet material corrugation including the

transformable mandrel containing the plane elements pivotedly connected in-between with

the use of gas-proof fabric, the means for preliminary mandrel transformation including the

removable vacuum chamber with the sealing roller and the vacuumization system, and the

means for final mandrel transformation including the traverse with the drive providing its

plane-parallel travel is characterized by that it includes the mechanism for putting the

mandrel into the initial plane state containing two parallel slabs located one over another on

either side of the mandrel and the drive providing their reciprocal travel.

Claim 2 (Original): A device according to claim 1 is characterized by that it includes

the means for preliminary mandrel transformation made in the form of two systems of

pushers rows installed correspondingly on the lower and the upper slabs.

Claim 3 (Original): A device according to claim 2 is characterized by that it includes

the pushers with the individual drives providing their seesaw travel whereof the perforations

in the slabs provide the consecutive interaction of the pushers with the transformable mandrel

on its either side at locations of mandrel elements pivot connections at the intersection of

saw-tooth and zigzag bending lines.

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Claim 4 (Original): A device according to claim 2 is characterized by that the rows of the lower pushers are placed so that they can come into contact with the mandrel along the protrusions zigzag lines while the rows of the upper pushers - along the recesses zigzag lines.

Claim 5 (Original): A device according to claim 1 is characterized by that it includes the means for final mandrel transformation containing the second traverse located on the lower slab on the other side of the mandrel parallel to the first one and the drive providing its plane-parallel travel.

Claim 6 (Currently Amended): A device according to elaims 2-3 claim 3 is characterized by that the distance L between the pushers rows in the direction of saw-tooth bending lines of the mandrel is equal to

$$L=\sqrt{L_r^2-h^2},$$

where L_r is the step of zigzag lines on the corrugated article development; h is the corrugated article relief height after the preliminary transformation.

Claim 7 (Currently Amended): A device according to elaims claim 5 is characterized by that the corrugated article relief height h after the preliminary transformation is taken minimal so that to provide further reciprocal transformation of the shaping mandrel with the blank by means of force application from the side of traverses.